

ABSTRACT OF THE DISCLOSURE

A film having a multilayer heterostructure which has at least one organic layer formed by self-assembly, characterized in that the organic layer contains from 1 to 100 mM of a sensitizing dye; and a film having a multilayer heterostructure which has at least one organic layer and at least one inorganic layer each formed by self-assembly, characterized in that the organic layer contains an aromatic compound. It is intended to provide these multilayer heterostructure films having advanced functions, a process for producing the same, and optical devices having advanced functions with the use of these films.